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(54) **SMOOTHED NORMALS FROM DEPTH
MAPS FOR NORMAL-BASED TEXTURE
BLENDING**

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ABSTRACT

Techniques of smoothing surface normals in a texture mapping application involve generating smoothed normals from the perspective of each camera using to capture images for texture mapping. Along these lines, a camera used to capture an image for texture mapping is situated at an orientation relative to the geometrical object onto which a texture mapping computer maps the texture image. The texture mapping computer places a filter window centered at a point on the geometrical object. The texture mapping computer then generates, as the smoothed normal at that point, an average normal over points in the filter window. The average normals thus computed for each camera are then used in the weights of the weighted average that is the image value at that point.